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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,682	05/24/2001	Timothy B. Cowles	2000-0058.01	3317

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EXAMINER

TON, DAVID

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 07/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/864,682

Applicant(s)

COWLES ET AL.

Examiner

David Ton

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24, 40-44 and 50-104 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-24, 40-44, 50-55, 60-76, 80-89 and 97-104 is/are allowed.
- 6) ☒ Claim(s) 56-58, 77, 90, 94 and 96 is/are rejected.
- 7) ☒ Claim(s) 59, 78, 79, 91-93 and 95 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6&7.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The abstract is objected because it is over 150 words. A new abstract is required. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).
3. Applicants Amendment A filed on 04/28/04 has been entered.
4. Claims 1-24, 40-44, and 50-104 are presented for examination.

***Claim Rejections - 35 USC ' 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 56-58 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Merritt patent no. 5,706,292.

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7. As to claim 56, Merritt teaches the invention as claimed, including a repair system for a memory device comprising at least one redundant plane [col. 3 lines 35-49], said system comprising a first address storage device [banks of fuses, col. 3 lines 35-49] included as part of said memory device, wherein said first address storage device is configured to store an address associated with at least one redundant plane of said memory device [col. 3 lines 35-49].

8. As to claim 57, Merritt teaches said first address storage device is configured to store an address associated with a first plurality of redundant planes [col. 3 lines 35-49].

9. As to claim 58, Merritt teach a second address storage device [2 banks of fuses, col. 3 lines 35-49].

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 77, 90, 94 and 96 are rejected under 35 U.S.C. § 102(e) as being anticipated by Leung et al. (Leung) patent no. 6,393,504.

12. As to claim 77, Leung teaches the invention as claimed, including redundancy circuitry for a memory chip, comprising:

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A redundant memory array on said memory chip and organized into at least one column [Fig. 5a, see col. 11 lines 8-16]; and

At least one register [repair column address register 551 of Fig. 5b] on said memory chip and configured to store a column address of said redundant memory array [see col. 12 lines 32-42].

13. As to claim 90, Leung teaches the invention as claimed, including a method of storing data for a memory device comprising: providing a device [register 550 of Fig. 5b] on a semiconductor die, wherein said die incorporates said memory device; and storing in said device data relating to a plurality of memory cell data [storing the address of defective cell, col. 12 line 17-31].

14. As to claim 94 and 96, Leung teaches storing column address of a defective cell [col. 12 lines 17-42].

### ***Allowable Subject Matter***

15. Claims 1-24, 40-44, 50-55, 60-76, 80-89 and 97-104 are allowed.

16. Claims 59, 78-79, 91-93 and 95 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

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17. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Ton, whose telephone number is (703) 306-3043. The examiner can normally be reached on Monday through Thursday from 6:30 AM to 4:00 PM and alternate Friday from 6:30 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady, can be reached at (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DT

July 09, 2004



**DAVID TON  
PRIMARY EXAMINER**